

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,792	11/18/2003	Yulun Wang	157438-0015	6134
1622 7	7590 07/24/2006		EXAMINER	
IRELL & MANELLA LLP 840 NEWPORT CENTER DRIVE SUITE 400 NEWPORT BEACH, CA 92660			SAN MARTIN, EDGARDO	
			ART UNIT	PAPER NUMBER
			2837	
			DATE MAILED: 07/24/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

5	V	
ゾ	,	

	Application No.	Applicant(s)				
	10/716,792	WANG ET AL.				
Office Action Summary	Examiner	Art Unit				
	Edgardo San Martin	2837				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I. sely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 12 Ma	av 2006.					
	action is non-final.					
3) Since this application is in condition for allowan		secution as to the merits is				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) <u>1-4,6-12,14-16,21-24,26-32 and 34-36</u>	is/are pending in the application	1.				
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-4,6-12,14-16,21-24,26-32 and 34-36	ĝ is/are rejected.					
7) Claim(s) is/are objected to.	- -					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	٠.					
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the E	Examiner.				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:						
<ol> <li>Certified copies of the priority documents</li> </ol>	s have been received.					
<ol><li>Certified copies of the priority documents</li></ol>	have been received in Application	on No				
<ol><li>Copies of the certified copies of the prior</li></ol>	ity documents have been receive	ed in this National Stage				
application from the International Bureau	(PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	_					
) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Notice of Informal Patent Application (PTO-152)     Paper No(s)/Mail Date   Other:						

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1 4, 6 12, 14 16, 21 24, 26 32 and 34 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paulos et al. (NPL Document titled Designing Personal Tele-embodiment) in view of Pin et al. (US 5,374,879), and further in view of Skaar et al. (US 6,304,050).

With respect to claims 1, 9, 21 and 29, Paulos et al. teach a robot, comprising a mobile platform; a camera coupled to the mobile platform, an arm coupled to the mobile platform; and a first effector coupled to the arm (Figs.1 and 2; Sections 1 – 4), wherein the arm includes a first linkage, and a second linkage coupled to the first linkage, the arm having an actuator that moves the second linkage relative to the first linkage in a first degree a freedom in a first mode, and in a second degree of freedom in a second mode (Section 4.5); but fail to disclose wherein the platform is holonomic and wherein the effector is a grasper.

Nevertheless, Pin et al. teach a holonomic platform used with a robot (Fig.3; Col.1, Lines 14 – 22 and Col.2, Lines 9 – 34).

On the other hand, Skaar et al. teach the use of grasper in a robotic system employing cameras for monitoring the robot actions (Fig.1; Col.59 – Col.5, Line 63).

Application/Control Number: 10/716,792 Page 3

Art Unit: 2837

It would have been obvious to a person with ordinary skill in the art at the time of the invention was made to employ the Pin et al. holonomic platform and the Skaar et al. grasper with the Paulos design because the holonomic platform would provide an omnidirectional platform having decoupled rotational and translational degrees of freedom, and the monitored grasper could perform specific grasping actions that could be visually controlled by a remote user, improving the mobility and performance of the robot.

With respect to claims 2-4, 6-8, 10-12 and 14-16, the Examiner considers that Paulos et al. teach the limitations described in the claims (Figs.1 and 2; Section 4).

With respect to claims 21 and 29, Paulos et al. teach a robot system comprising a broadband network; a remote station coupled to the broadband network, the remote station having a handle that can be manipulated to generate movement signals that are transmitted through the broadband network; a robot that is coupled to the broadband network and receives the movement signals from the handle of the remote station (Sections 1-3).

With respect to claims 22 - 24, 26 - 28, 30 - 32 and 34 - 36, the Examiner considers that Paulos et al. teach the limitations described in the claims (Figs.1 and 2; Section 4).

## Response to Arguments

2. Applicant's arguments filed on May 12, 2006 have been fully considered but they are not persuasive. The Examiner still considers that the obvious combination of the Paulos et al. document and the patents to Pin et al. and Skaar et al. teach the

Art Unit: 2837

limitations described in the claims as discussed above. The Examiner considers that any person with ordinary skill in the art would conclude from the Paulos et al. disclosure that the use of robotic arms with multiple degrees of freedom are not excluded form the Paulos et al. invention's scope; just because one embodiment was selected to simplify the representation of the invention, it does not means that other embodiments, that could be more complex, inherently presented by the disclosure would not fall within the scope of the invention. Furthermore, the patent to Skaar et al. clearly shows the use of a robotic arm with multiple degrees of freedom; in addition, it has been held that one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references. In re Keller, 208 USPQ 871 (CCPA 1981).

#### Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 10/716,792 Page 5

Art Unit: 2837

### **Contact Information**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo San Martin whose telephone number is (571) 272-2074. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 ext.37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edgardo San Martín Primary Examiner Art Unit 2837

Class 318 July 17, 2006